

1 Abstract of the Disclosure

2 A surgical device for cutting substantially across a cornea
3 of an eye of a patient, the device including a positioning ring
4 to be attached to an eye surrounding a cornea to be cut, and
5 defining an aperture sized to receive and expose the cornea to
6 be cut. The surgical device further includes a cutting head
7 assembly structured to be guided and driven over an upper
8 surface of the positioning ring in a generally arcuate path, and
9 having a cutting element positioned therein and structured to
10 oscillate laterally to facilitate smooth and effective cutting
11 of the cornea. The cutting head assembly is structured to be
12 detachably coupled to the positioning ring by a coupling member
13 which permits movement of the cutting head assembly relative to
14 the positioning ring along the generally arcuate path, but
15 maintains sufficient engagement therebetween to ensure that
16 smooth, steady, driven movement is maintained.